

Abstract of the Disclosure

[0038] A gas turbine engine having a turbine section cooling system is disclosed which is able to cool the turbine section of the gas turbine engine to an optimal operating temperature range, while at the same time not substantially degrading engine performance. The disclosure provides a number of different structures for doing so including the provision of turning foils, turning holes, and turning grooves within a secondary air flow cavity which turns or directs cooling and parasitic leakage air into the turbine section in a direction in substantial alignment with a gas flow path through the turbine section.